

2. (Currently Amended) The method according to claim 1, wherein the data are transmitted using a transponder which comprises the data storage (20) and the resonant circuit (30).
3. (Currently Amended) The method according to claim 1 ~~or claim 2~~, wherein at least one of the data storage (20) and/or a data processing unit are supplied with energy using the resonant circuit (30).
4. (Currently Amended) The method according to ~~one of the preceding claims~~ claim 1, wherein the resonant circuit is connected via the data transmission channel (40) to a transmission antenna (50) from which the data are transmitted to a control and evaluation device (60).
5. (Currently Amended) The method according to ~~one of the preceding claims~~ claim 1, wherein the data transmission takes place whilst the at least one sample (11) is in a cryopreserved state.
6. (Currently Amended) The method according to ~~one of the preceding claims~~ claim 1, wherein data are transmitted using the resonant circuit (30) which comprise at least one of sample data with which the sample (11) is identified and characterised, process data characteristic of sample storage conditions so far and/or control data with which predetermined operating states of the cryostorage device are set or triggered.
7. (Currently Amended) The method according to claim 6, wherein the sample data contain measured values which have been obtained for the samples or the cryostorage device, and the

control data are adjusted using the control and evaluation device (60) depending on the measured values.

8. (Currently Amended) The method according to ~~any one of the preceding claims~~ claim 1, wherein the data transmission takes place at temperatures below  $-40^{\circ}\text{C}$ .

9. (Currently Amended) A cryostorage device (100), especially for the cryostorage of biological samples in the frozen state, ~~which comprises~~ comprising:

- at least one sample carrier (10) to receive at least one sample (11), and
- at least one data storage (20), and

~~characterised by~~

- at least one resonant circuit (30) which is connected to the data storage (20) and is set up to transmit data inductively from the data storage (20) into a wireless transmission channel (40) ~~and/or conversely~~ or using the resonant circuit.

10. (Currently Amended) The cryostorage device according to claim 9, wherein the resonant circuit (30) is part of a transponder which comprises the data storage (20) and the resonant circuit (30).

11. (Currently Amended) The cryostorage device according to ~~one of claims 9 or 10~~ claim 9, wherein a separate sample data storage is provided.

12. (Currently Amended) The cryostorage device according to ~~one of claims 9 to 11~~ claim 9 which contains a data processing unit in which the data storage (20) is integrated.

13. (Currently Amended) The cryostorage device according to ~~one of claims 9 to 12~~ claim 9, wherein a transmission antenna (50) and a control and evaluation device (60) are provided wherein data can be transmitted between the data storage (20) and the control and evaluation device (60) via the resonant circuit (30) and the transmission antenna (50).

14. (Currently Amended) The cryostorage device according to ~~one of claims 9 to 13~~ claim 9, wherein the sample carrier (40), the data storage (20) and the resonant circuit (30) are arranged in a thermally insulated container (70) for accommodating a cooling medium, ~~especially liquid~~ nitrogen.

15. (Currently Amended) A cryostorage system (200) containing a plurality of cryostorage devices according to ~~any one of claims 9 to 14~~ claim 9.

16. (Currently Amended) The cryostorage system according to claim 15, wherein the cryostorage devices are arranged in a cryocontainer (70) with a transmission antenna (50) and a control and evaluation device.

17. (Currently Amended) The cryostorage system according to ~~one of claims 15 or 16~~ claim 15, which is equipped with cooling using liquid nitrogen or liquid nitrogen vapour.

18. (Cancelled)

19. (New) A method according to claim 1, wherein a telemetric transponder is used for data transmission in a cryostorage device for biological samples.

20. (New) The cryostorage device according to claim 14, wherein the thermally insulated container is adapted for accommodating liquid nitrogen.

21. (New) The method according to claim 2, wherein at least one of the data storage and a data processing unit are supplied with energy using the resonant circuit.